Date: May 9, 2007

From: Water Resources Group, Salt Lake City

All Colorado River Annual Operating Plan (AOP) Recipients

Current Status

	April inflow (unreg) (acre-feet)	Percent of Normal	Midnight May 8 Elevation	Reservoir Storage (acre-feet)
Fontenelle	49,000	53	6473.76	136,000
Flaming Gorge	73,000	46	6026.19	3,204,000
Blue Mesa	67,000	89	7186.91	558,000
Powell	802,000	81	3602.01	11,942,869
Navajo	121,000	71	6078.41	1,610,000

Expected Operations

<u>FONTENELLE</u> - Releases from Fontenelle Reservoir are currently 900 cfs and steady while inflows are averaging about 1500 cfs. The reservoir elevation is steadily increasing and is currently about 6473.4 feet above sea level which is 32.6 feet from full pool.

The update for May of the Water Supply forecast for Fontenelle Reservoir (Apr-July inflow volume) actually increased by 30,000 acre-feet from one month ago. The current Water Supply forecast is now 400,000 acre-feet which is 47% of average. Releases from Fontenelle Reservoir will likely not increase from current levels during the spring runoff. Current projections show that Fontenelle Reservoir could nearly fill by the end of July potentially reaching a peak elevation of approximately 6502 feet above sea level which is 4 feet below the spillway invert elevation.

Open forum discussions on Fontenelle operations take place at the "Fontenelle Reservoir Working Group" meetings. The Working Group is a forum for information exchange between Reclamation and other parties associated with the operation of Fontenelle Reservoir. The public is encouraged to attend and express their concerns and interests with regard to Fontenelle Reservoir operation. The next Working Group meeting is now scheduled for April 12, 2007 at 10:00 am at Seedskadee National Wildlife Refuge in Wyoming. For more information about the Fontenelle Working Group, contact Ed Vidmar at 801-379-1182.

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FLAMING GORGE - Yampa River Flows decreased significantly beginning on May 6th and will likely begin to rebound on or about May 10th. Depending on the magnitude of the forecasted peak flows of the Yampa River near the end of this week (week of May 7th), releases from Flaming Gorge may be increased to match these peak flows. Notice of any increase will be sent as soon as possible via email and will also be posted on the Reclamation website at the following URL:

http://www.usbr.gov/uc/water/crsp/cs/fgd.html

Reclamation has decided to implement an operation to attempt to achieve the spring flow proposal of the Flaming Gorge Technical Working Group. On April 19, 2007 Reclamation met with the Flaming Gorge Working Group and presented the spring flow proposal and accepted comments from the Flaming Gorge Working Group and the general public through April 26, 2007. Reclamation has considered the comments it has received and has decided to implement an operation to achieve the following:

- 1. A spring peak release from Flaming Gorge will be scheduled to commence when the peak flows of the Yampa River appear to be eminent. The maximum release rate from Flaming Gorge Dam will be limited to powerplant capacity (approximately 4600 cfs).
- 2. Powerplant capacity releases will be maintained to achieve flows at the Jensen gauge of 8300 cfs for 7 days. If this flow objective is achieved or if it appears that this magnitude will not be possible for 7 days, then releases will be reduced to base flow levels with a ramp down rate not to exceed 350 cfs per day.
- 3. If, through implementation of steps 1 and 2, flows at the Jensen gauge achieve 12,000 cfs or greater, Reclamation will consider delaying the downramp if powerplant releases can maintain flows in Reach 2 above 12,000 cfs and the Recovery Program and the Fish and Wildlife Service communicate to Reclamation on a daily basis that floodplain connectivity is sufficient for entrainment and larval fish are being detected in the river channel. If this daily communication is not maintained and steps 1 and 2 have been achieved, Reclamation will schedule releases to be reduced to baseflow levels (approximately 1150 cfs) at a ramp rate not to exceed 350 cfs per day.

Releases from Flaming Gorge are currently steady at 800 cfs. The reservoir elevation of Flaming Gorge is currently 6026.03 feet above sea level and rising. Inflows are averaging about 1700 cfs over the past 10 days. The unregulated inflow to Flaming Gorge in April was well off the forecasted volume. The April forecast volume was 110,000 acre-feet. The actual volume of unregulated inflow in April was only 72,000 acre-feet. Temperatures in the basin were warmer than normal.

The May update of the Water Supply forecast (Apr-Jul Unregulated inflow volume) was reduced from 525 KAF (44% of average) to 500 KAF (42% of average). This is moderately dry in terms of hydrologic classification under the Flaming Gorge Record of Decision.

The next Flaming Gorge Working Group meeting is scheduled for August 23, 2007 in Vernal Utah. The meeting will be held at 10:00 a.m. at the Western Park Convention Center located at 302 East 200 South in Vernal Utah. For directions, please call 435-789-7396. The Flaming Gorge Working Group is an open public forum for information exchange between Reclamation and the stake holders of Flaming Gorge Dam. The public is encouraged to attend and comment on the operations and plans presented by Reclamation at these meetings. For more information on this group and these meetings please contact Ed Vidmar at 801-379-1182.

<u>ASPINALL</u> – April unregulated inflow into Blue Mesa Reservoir was 67,000 acre-feet or 89 percent of average. On May 4, 2007 the basin snowpack was 48 percent of average.

Precipitation during April was 110 percent of average. The current inflow rate into Blue Mesa Reservoir is about 2,500 cfs while reservoir releases are averaging about 850 cfs. Reservoir inflows during March were much higher than usual primarily because of unseasonably warm temperatures. During the month of April, inflows were a little below average as a result of moderating temperatures during the month. Currently the weather pattern has cooled off some what, but the mountain snowpack has taken a considerable loss of over 5 inches of water during the last ten days. As a result the inflows into the Aspinall Unit reservoirs have seen much higher inflows than they were just a week ago. Blue Mesa's present elevation is 7485.14 feet, which corresponds to a storage content of about 544,000 acre-feet.

The latest Water Supply Forecast for Water Year 2007 has been issued and the April through July unregulated inflow is forecasted to be at 445,000 acre-feet (62% of normal), a drop of 15,000 acre-feet from last month's forecast. Based on this forecast, Blue Mesa Reservoir is not projected to fill this season.

Releases from Crystal are currently set at 1250 cfs. The Gunnison Diversion Tunnel started taking water for the new season on April 2, 2007. The current diversion rate in the tunnel is 775 cfs, which results in a river flow below the diversion tunnel of approximately 475 cfs. These rates will most likely change as conditions warrant, primarily as we respond to changes in the forecasted spring inflows.

The last meeting of the "Aspinall Unit Working Group" was held on Thursday, April 26, 2007 at 1:00 PM at Reclamation's Grand Junction Office. At this meeting, review of last winter's reservoir operations, and plans for this spring and summer operations were discussed. These meetings are open forum discussions on the Aspinall Unit reservoir operations with many interested groups participating. Anyone needing further information about these meetings should contact Dan Crabtree in the Grand Junction Area Office at (970) 248-0652.

<u>NAVAJO</u> – Reclamation is currently providing a peak spring release from Navajo Reservoir. Navajo Reservoir began ramping up its releases at 5:30 a.m. on Monday, April 30, 2007. Reservoir releases gradually increased over four days until the maximum release rate of 5,000 cfs was reached on Thursday, May 3rd. This release rate will remain at 5,000 cfs through Wednesday, May 16th. Then on Thursday, May 17th, the release will begin to be gradually decreased until it reaches 500 cfs on May 24th. The release pattern, duration, and magnitude for the spring peak release generally follow the San Juan River Basin Recovery Implementation Program (SJRIP) Flow Recommendations for Endangered Fish. Adjustments may be made to the releases if significant precipitation occurs during the scheduled release period.

The snowpack as of May 3rd for the upper San Juan River basin is averaging 63 percent. The Animas River basin snowpack currently stands at 60 percent of average. Unregulated inflow into Navajo Reservoir during the month of April was 119,000 acre-feet, or 69 percent of average. Currently, the daily reservoir inflow is averaging about 4,400 cfs while reservoir releases are set at 5,000 cfs. NIIP diversions are currently set at 700 cfs. The reservoir water

surface elevation is currently 6079.89 feet, which corresponds to a storage content of about 1.623.000 acre-feet

The latest Water Supply Forecast for Water year 2007 has been issued and the April through July unregulated inflow is now forecasted to be 480,000 acre-feet or 60 percent of average. This forecast is a small increase of 5,000 acre-feet from last month's forecast, reflecting the continued dry hydrologic conditions within the basin.

On a brighter note; Navajo Reservoir had a plentiful increase in storage last October and is essentially full right now (currently at 95 percent of capacity). Based on this and the forecasted inflows, the reservoir should level out at about elevation 6073 feet after the spring peak release is over. Reservoir levels for the rest of the summer season should continue at about that same level with perhaps small increases as it goes into the monsoon season.

A public meeting on Navajo Reservoir operations was held on Tuesday, May 1, 2007 at 1:00 p.m. in Farmington, New Mexico. Reservoir operations over last fall and winter were reviewed, and plans for next spring and summer 2007 operations were discussed. These are open forum discussions on the operation of Navajo Reservoir with many interested groups participating. Anyone interested in the general operation of the reservoir is encouraged to attend. Please contact Pat Page in Reclamation's Durango, Colorado Office at (970) 385-6560 for information about these meetings or the daily operation of Navajo Reservoir.

<u>GLEN CANYON DAM OPERATIONS</u> - Releases from Glen Canyon Dam in May 2007 will average 10,000 cubic feet per second (cfs) with a total of 600,000 acre-feet scheduled to be released for the month. On Mondays through Fridays in May, daily release fluctuations due to load following will likely vary between a low of 6,500 cfs (during late evening and early morning off-peak hours) to a high of 12,500 cfs (during daylight and early evening on-peak hours). On Saturdays, release fluctuations will likely vary between a low of 6,500 cfs to a high of 11,750 cfs. On Sundays, release fluctuations will likely vary between a low of 6,500 cfs to a high of 11,250 cfs.

Releases from Glen Canyon Dam in June 2007 will be higher than May. A total of 800,000 acre-feet is scheduled to be released in June of 2007.

Upper Colorado River Basin Hydrology

Projections for April through July runoff to Lake Powell in 2007 remain low. The water supply picture in the Colorado River Basin neither improved nor weakened in April. April was a month with periods of above average and below average temperatures, with precipitation nearly average. The May final unregulated inflow forecast for Lake Powell is 4.0 million acre-feet. This is only 50 percent of average.

Unregulated inflow in April 2007 was 801,900 acre-feet, or 81 percent of average. Above average temperatures the final two days of April and first two days of May produced has produced a surge in streamflows. This surge in streamflows is just now reaching Lake Powell. Inflow to Lake Powell is currently 16,000 cfs (May 4, 2007)

and is increasing. The peak inflow to Lake Powell for 2007 will probably occur within the next several days, with the magnitude of the peak likely near 25,000 cfs. However, Lake Powell inflow the second half of May and all of June is projected to be much below the historic average. Throughout the basin, snowpack diminished significantly as we exited April and entered May. Basinwide snowpack above Lake Powell is now only 46 percent of average (May 4, 2007).

Water year 2007 (which began on October 1, 2006) started out "wet," with October precipitation over 200 percent of average. Inflow to Lake Powell in October 2007 was 184 percent of average. Unfortunately, the pattern quickly changed. During the five-month period of November 2006 through March 2007, basinwide precipitation was below average. March 2007 was a particularly dry month, featuring above average temperatures and below average precipitation. Normally, mountain snowpack increases in March. However, in March 2007, a significant reduction in snowpack occurred, which in turn, substantially weakened the water supply picture for 2007.

The current elevation of Lake Powell (May 4, 2007) is 3,600.6 feet, 99.4 feet from full pool elevation of 3,700 feet. Reservoir storage is currently 11.80 million acrefeet, or 49 percent of capacity. The water surface elevation of Lake Powell reached a seasonal low of 3,597.4 feet on March 16, 2007. Under the current inflow forecast, Lake Powell would reach a seasonal peak elevation of about 3,606 feet in late June 2007.

Upper Colorado River Basin Drought

The Upper Colorado River Basin is experiencing a protracted multi-year drought. Since 1999, inflow to Lake Powell has been below average in every year except one.

In the summer of 1999, Lake Powell was essentially full with reservoir storage at 23.5 million acre-feet, or 97 percent of capacity. Inflow to Lake Powell in 1999 was 109 percent of average. The manifestation of drought conditions in the Upper Colorado River Basin began in the fall months of 1999. A five year period of extreme drought occurred in water years 2000, 2001, 2002, 2003, and 2004 with unregulated inflow to Lake Powell only 62, 59, 25, 51, and 49 percent of average, respectively. Lake Powell storage decreased through this five-year period, with reservoir storage reaching a low of 8.0 million acre-feet (33 percent of capacity) on April 8, 2005.

Drought conditions eased in water year 2005 in the Upper Colorado River Basin. Precipitation was above average in 2005 and unregulated inflow to Lake Powell was 105 percent of average. Lake Powell increased by 2.77 million acre-feet (31 feet in elevation) during water year 2005. But as is often the case, one favorable year does not necessarily end a protracted drought. In 2006, there was a return to drier conditions in the Colorado River Basin. Unregulated inflow to Lake Powell in water year 2006 was only 73 percent of average.

Water year 2007 will almost certainly be a year of below average inflow. The current projection for spring runoff into Lake Powell is only 50 percent of average. Projected

inflow to Lake Powell for the entire 2007 water year is 68 percent of average. With 2007 projected to be a below average inflow year, one sees that over the past 8 years (2000 through 2007, inclusive) inflow to Lake Powell will have been below average in all but one year (2005).

Reservoir storage in Lake Powell and Lake Mead has decreased over the past 8 years. Reservoir storage in Lake Powell and Lake Mead is currently 49 and 52 percent of capacity, respectively.